Title (en)

PRINT HEAD FOR DROP-ON-DEMAND INK JET PRINTING APPARATUS

Publication

EP 0260884 B1 19911204 (EN)

Application

EP 87308041 A 19870911

Priority

US 90849786 A 19860917

Abstract (en)

[origin: EP0260884A2] The present invention relates to a print head for a drop-on-demand ink jet printer of the type which comprises an actuator section (12) of relatively large cross section and including a plurality of electromechanical transducers (26), each formed with an ink path having an entrance end (32) and an exit end (34), an ink manifold (18), means (17) for conveying ink from said ink manifold to the entrance end of the ink path in each of said transducers, a print element section (14) having a relatively small cross section and including a plurality of nozzles (36), one nozzle for each of the transducers, and a connecting section (16) located between the actuator section (12) and the print element section (14) and including a plurality of ink paths (35, 45, 48) providing a respective ink path between the exit end of each transducer and its corresponding nozzle. According to the invention the print head is characterised in that the connecting section (16) is shaped so that it forms a fan-in section connecting the relatively large cross section actuator section to the relatively small cross section print element section and is made at least partially from a resilient material so that it forms a seal for each of the ink paths at its junctions with the actuator section and the print element section.

IPC 1-7

B41J 2/14

IPC 8 full level

B41J 2/045 (2006.01); B41J 2/055 (2006.01); B41J 2/14 (2006.01)

CPC (source: EP US)

B41J 2/14201 (2013.01 - EP US); B41J 2002/14387 (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0260884 A2 19880323; **EP 0260884 A3 19890517**; **EP 0260884 B1 19911204**; DE 3774983 D1 19920116; JP S6382752 A 19880413; US 4771298 A 19880913

DOCDB simple family (application)

EP 87308041 A 19870911; DE 3774983 T 19870911; JP 20200087 A 19870814; US 90849786 A 19860917